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V o l u m e T w o

DIAGNOSES OF NEW AMERICAN PLANTS -- I (a)

C. L. Lundell

STRUTHANTHUS ESCUINTLENSIS Lundell, sp. nov.

Frutex epiphyticus omnino glaber, ramulis subteretibus, brunnescentibus. Folia petiolata, petiolo ad 1.5 cm. longo; lamina coriacea, elliptica, 2.2--5 cm. longa, 1.7--3.2 cm. lata, apice rotundata, minute apiculata, basi rotundata, nervis lateralibus inconspicuis, venulis obsoletis. Inflor-
escentiae subspicatae, axillares, solitariae, ad 12 cm. longae, floribus in spiculis trifloras subsessiles dispositis, bracteolis acutis. Petala linearia, 6.5 mm. longa. Stylus ca. 4.5 mm. longus, haud contortus. --MEXICO: Chiapas, Mt. Ovando, alt. 1800 m., on tree, July 1--16, 1940, Eizi Matuda 4185 (Univ. Michigan Herb., type). --Allied to S. macrostachyus Lundell and S. belizensis Lundell.

CALLIANDRA SILTEPECENSIS Lundell, sp. nov.

Arbor parva, 3--4 m. alta, ramulis subteretibus dense hirtellis. Stipulae ca. 4 mm. longae. Folia petiolata, petiolo ad 2.5 cm. longo, hirtello, rachi usque ad 5.5 cm. longa; pinnis 5--7-jugis; foliolis chartaceis, 21--53-jugis, linear-oblongis, ad 8 mm. longis, 1.5 mm. latis, sessilibus, adpresse hirtello-ciliatis, apice acutis, basi obliquis. Capitulae axillares, pedunculis ad 5.5 cm. longis, parce hirtellis vel glabris. Legumina glabra, ad 10.5 cm. longa, 0.9 cm. lata, apice rotundata et minute apiculata, basi stipitata. --MEXICO: Chiapas, Barranca Honda, Siltepec, riverside, October--November, 1940, Eizi Matuda 4040 (Univ. Michigan Herb., type).

HELIOCARFUS BELIZENSIS Lundell, sp. nov.

Arbor, 13 cm. diam., omnino minute rufo-glandulosa. Ramuli parce hirsuti, glabrescentes. Folia petiolata, petiolo 1.3--4.5 cm. longo; lamina integra, late ovata, ovata, vel ovato-lanceolata, 7--13 cm. longa, 2.5--6.5 cm. lata, apice caudato-acuminata, basi rotundata, serrulata, supra parce et breviter hirsuta, subtus stellato-pilosa. Infructescentia magna, rhachibus hirsutis. Pedicelli fructiferi 4.3--5 mm. longi. Fructus crasse stipitatus. --BRITISH HONDURAS: El Cayo District, Vaca, on hilltop, Mar. 2, 1938, Percy H. Gentle 2273 (Univ. Michigan Herb., type), vernacular name moho. --The clothing of minute red glands suggests H. glanduliferus Robinson, but that species has sessile fruits.

HELIOCARFUS CUSPIDATUS Lundell, sp. nov.

Arbor, 20 cm. diam., ramulis parce et minute stellato-puberulentibus. Folia petiolata, petiolo 2.5--7 cm. longo; lamina ovato-lanceolata, 7--15 cm. longa, 3.6--6.7 cm. lata, apice caudato-acuminata, basi late obtusa vel rotundata, serrulata, glabrescentia. Inflorescentia parva, rhachibus minute stellato-tomentulosis; pedicellis 5--6 mm. longis. Sepala 4, linearis, 6 mm. longa, extus minute stellato-tomentulosa. Petala 4, anguste spatulata, 3.8--4 mm. longa, base breviter pilosa. Stamina 14 vel 16. Stylus bifidus, ovario longior. Pedicelli fructiferi 3.5--4.5 mm. longi. Fructus stipitatus. --BRITISH HONDURAS: El Cayo District, Vaca, on hilltop, Mar. 4, 1938, Percy H. Gentle 2297 (Univ. Michigan Herb., type), vernacular name moho; near Camp 6, on hillside, Mar. 15, 1938, Gentle 2355. --From description H. cuspidatus appears to be close to H. Donnell-Smithii Rose, but differs in the narrower serrulate leaves with caudate-acuminate tips, longer sepals, plumose hairs on faces of young fruits, and in the longer fruit stipes. The flowers appear to be pseudohermaphroditic which may account for the differences in pedicel lengths.

HELIOCARFUS FLORIBUNDUS Lundell, sp. nov.

Arbor, 15 m. alta, 25 cm. diam. Ramuli glabrescentes. Folia petiolata, petiolo 3.5--11.5 cm. longo; lamina integra, late ovata vel suborbicularia, 10--22 cm. longa, 7--12.5 cm. lata, apice acuminata, basi rotundata vel subcordata, serrulata, supra minute stellato-puberula, subtus parce tomentosa. Infructescentia magna, usque ad 45 cm. longa, rhachibus fulvis, breviter stellato-tomentulosis. Pedicelli fructiferi 2--4 mm. longi. Fructus stipitatus. --BRITISH HONDURAS: Belize District, Gracie Rock, Sibun River, Mar. 28, 1935, Percy H. Gentle 1534 (Univ. Michigan Herb., type), vernacular name mountain moho. El Cayo District, Little Cockericot, Belize River, Mar. 27, 1933, G. L. Lundell 4177.

Stann Creek District, 22 Mile, Feb. 17, 1932, W. A. Schipp 872, vernacular name broad leaf moho. --Essential characteristics of H. floribundus are as follows: leaf blades minutely appressed stellate-puberulent above and tomentose beneath, huge panicles with branches and pedicels clothed with short fulvous stellate tomentum, short pedicels, long fruit stipes, faces of fruit rugose and persistently hirsute but not bearing plumose hairs, and plumose bristles of fringe as much as 8 mm. long. It is related to H. tomentosus Turcz., which has smaller leaves and coarsely hirsute branchlets and infructescence.

HELIOCARPUS GENTLEI Lundell, sp. nov.

Arbor, 10 cm. diam., ramulis minute stellato-tomentulosis. Folia persistenter stipulata, stipulis 16 mm. longis vel minoribus, petiolata, petiolo 4.5--14 cm. longo; lamina suborbicularia, 12--26 cm. longa, 9--17 cm. lata, trilobata, lobo terminali acuminato, lobis lateralibus acutis vel rotundatis, basi cordata, serrulata, supra glabrescens, nervis parce et minute stellato-puberulentis, subtus parce stellato-puberulens, nervis breviter villosis. Inflorescentia magna, rhachibus stellato-tomentulosis, pedicellis 3.5--4.5 mm. longis. Sepala 4, linearis, 5.5--6 mm. longa, obtusa, exteriora stellato-tomentulosa. Petala 4, spatulata, 4--4.5 mm. longa. Stamina 16. Stylus ad mediam bilobus, ovario duplo longior. Fructus ignotus. --BRITISH HONDURAS: Belize District, Gracie Rock, Sibun River, on hilltop, Jan. 30, 1936, Percy H. Gentle 1787 (Univ. Michigan Herb., type), vernacular name white moho. --In the absence of fruits, the exact relationship is difficult to determine. The persistent stipules suggest an alliance with H. stipulatus Hochr. which, according to description, has sordid-tomentose branches, flowers almost sessile, tuberculate sepals, and the androgynophore surrounded by a conspicuous pilose ring. H. Gentlei differs in these and other significant characteristics. The large 3-lobed leaves, short villous beneath along the primary and secondary veins, the minute gray stellate tomentum of branchlets and inflorescence, and the nodose flowers, in addition to the persistent stipules already mentioned, distinguish the species.

DAPHNOPSIS FLAVIDA Lundell, sp. nov.

Arbor parva, 5 m. alta, ramulis rubris, juvenilibus parce strigosis vel glabrescentibus. Folia petiolata, petiolo ad 5 mm. longo; lamina glabra, subcoriacea, flavida, oblongo-elliptica, 5.5--10 cm. longa, 2--4 cm. lata, apice attenuata, obtusa, basi acuta, nervis venisque prominulis et reticulatis, nervis lateralibus utroque latere ca. 8. Inflorescentiae ♂ axillares vel laterales, pauciflorae, pedunculis

minute et parce strigillosis, ca. 3 mm. longis, floribus flavidus apice umbellatis, pedicellis minute et parce strigillosis, ad 2 mm. longis; perianthii tubus ca. 11 mm. longus, lobis 4, ovato-orbicularibus, 2--2.5 mm. longis, minute puberulis, extus fere glabris. Ovarium glabrum. Styli 1.5 mm. longi. --MEXICO: Chiapas, Mt. Ovando, in forest, alt. 2000 m., July 1--16, 1940, Eizi Matuda 4157 (Univ. Michigan Herb., type).

EUGENIA ESCUINTLENSIS Lundell, sp. nov.

Arbor, 15 m. alta, glabra, ramulis gracilibus, internodiis elongatis. Folia petiolata, petiolo canaliculato, ad 7 mm. longo; lamina chartacea, flavida, obovata, obovato-elliptica, vel oblongo-elliptica, 5--10.5 cm. longa, 1.7--4.7 cm. lata, apice subacuminata, acumine obtuso, basi acuta, nervis lateralibus 7--10-jugis, utrinque prominulis. Flores breviter racemosi, racemis ad 5 mm. longis, fasciculatis, glabris, axillaribus; pedicellis 4--7 mm. longis; bracteolis triangulari-ovatis, ca. 0.8 mm. longis, parce puberulis. Sepala 4, late ovata, 1.2--1.5 mm. longa, parce ciliolata. Petala suborbicularia, ca. 3.5 mm. longa. Stylus 4.5 mm. longus. --MEXICO: Chiapas, Finca Esperanza, Escuintla, Feb. 28, 1940, Eizi Matuda 4144 (Univ. Michigan Herb., type).

VACCINIUM MATUDAI Lundell, sp. nov.

Frutex; ramulis rubris, juvenilibus parce pilosellis, mox glabrescentibus. Folia petiolata, petiolo ad 2.5 mm. longo, crasso; lamina sublucida, crasse coriacea, ovato-cordata, 2--4.5 cm. longa, 1.5--3.5 cm. lata, apice obtusa, basi late cordata, obscure crenulata, utrinque glabra costa ad basin puberula excepta, venulis reticulatis. Inflorescentia rubra, glabra vel parce pilosella, pauciflora, racemosa, ca. 2 cm. longa, pedicellis 3.5--5 mm. longis. Calyx glaber, calycis lobi 5, late deltoidei, ca. 1 mm. longi, acuti. Corolla urceolata, ca. 7 mm. longa, extus glabra, lobis 5, ovato-oblongis, ca. 1.5 mm. longis, obtusis, intus parce pilosis. Filamenta pilosa. Antherae 3 mm. longae, scalcaratae. Ovarium glabrum, ut videtur 10-loculare. Fructus ca. 5 mm. diam. --MEXICO: Chiapas, Barranca Honda, Siltepec, growing on rocks, alt. 2600 m., Oct.--Nov., 1940, Eizi Matuda 4074 (Univ. Michigan Herb., type). --Allied to V. Selerianum (Loes.) Sleumer.

ARDISIA (Graphardisia) PAQUITENSIS Lundell, sp. nov.

Ramuli crassiusculi, glabri. Folia petiolata, petiolo marginato, ad 1.8 cm. longo; lamina membranacea, glabra, integra, elliptica vel obovato-elliptica, 23.5--30 cm. longa, 11--13.5 cm. lata, apice subabrupte acuminata, basi angustata. Inflorescentiae glabrae, terminales, ca. 3.5 cm. longae,

bracteae foliolosae. Pedicelli usque ad 8 mm. longi. Sepala oblonga, 4.5--5 mm. longa. Petala elliptica, ca. 7 mm. longa. Stamina 4 mm. longa, filamentis glandulosis, ca. 1.2 mm. longis. Ovarium glabrum. --COSTA RICA: San José Province, low hills above Río Paquita, alt. 5--50 m., Aug. 15, 1936, C. W. Dodge & V. F. Goerger 9885 (Herb. Field Mus., No. 885,447, type). --*A. paquitensis*, allied to *A. opegrapha* Oerst., is remarkable for its large entire leaves up to 30 cm. long and 13.5 cm. wide, and the small inflorescence scarcely 3.5 cm. long.

(a) Papers from the University of Michigan Herbarium.

A NEW SPECIES OF PREMNA FROM THE PHILIPPINES

E. D. Merrill

PREMNA ATRA Merrill, sp. nov. §Premnos.

Arbor parva, inflorescentiis exceptis glabra vel subglabra, ramis pallidis, subteretibus, ramulis brunneis, glabris vel leviter pubescentibus; foliis in sicco atris, utrinque concoloribus nitidisque, oblongo-ovatis vel late lanceolato-ovatis, integris, firmiter chartaceis, 8--15 cm. longis, 4--6 cm. latis, sursum angustatis, longe acuminatis, basi subrotundatis, utrinque glabris vel supra ad costam nervosque et subtus in axillis inferioribus breviter pubescentibus; nervis primariis utrinque 5--6, perspicuis, utrinque plus minusve elevatis, plerumque pallide brunneis, laxe arcuato-anastomosantibus, reticulis primariis sublaxis, ultimis subobscuris, subcatervis; petiolis 1.5--4 cm. longis, supra subplanis vel leviter canaliculatis, hic breviter pubescentibus, ceteroquin glabris; inflorescentiis terminalibus, corymboso-cymosis, plerumque pedunculatis (pedunculo 1--2.5 cm. longo), 5--7 cm. longis latisque, breviter subadpresse pubescentibus (praesertim partibus junioribus); floribus circiter 5 mm. longis, in sicco atris, pedicellis circiter 1 mm. longis, bracteis oblongis, obtusis, circiter 2 mm. longis, bracteolis brevioribus vix 1 mm. longis; calycibus subobliquis, distincte 2-labiatis, cupulatis, glabris vel extus parcissime breviter pubescentibus, labio majore 3-lobato, minore 2-lobato, lobis late rotundatis, brevibus; corolla extus glabra, intus villosa, 2-labiata, labio inferiore 3-lobato, lobis centralibus ad 1.5 mm. longis, suborbiculari-